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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/523,390

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER

DOWLING, WILLIAM C

ART UNIT

PAPER NUMBER

2851

MAIL DATE

DELIVERY MODE

08/15/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/523,390

Applicant(s)

VANLIER ET AL.

Examiner

William C. Dowling

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

1. Claims 1-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention..

Applicant describes Figure 3 as illustrating a relationship between lamp current in C being in phase whereas the states of A, B and D, E show an out of phase relationship. The light output appears the same in all instances with respect to the color change according to the illustration with the only apparent difference in the colors being scrolled during the particular pulse. Each pulse occurs when a color is not changing.

Further, it is not understood what is meant by a "phase" of a color sequential color cycle and additionally what such phase is when applied to all colors being projected as scrolling bands.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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3. Claims 1, 3, 6, 7-8, 10-11 rejected under 35 U.S.C. 102(b) as being anticipated by Marshall et al. (5,706,061).

Marshall et al. discloses a color projection device comprising:

a light valve (26) for modulating incident light;

an AC light source (14) for generating light containing color components;

an illumination unit (24) for sequentially illuminating the modulator with sequential colored lights.

As seen in Figure 4, 1 video frame consisting of periods for red, blue and green relates to 105 cycles of the AC current cycle. . As noted in Column 8 Lines11-23, "the switching frequency of the lamp... is much higher than and multiple of the color wheel rotation frequency". This is an out-of-phase relationship, as best the term can be understood. Only when cycles are in a 1:1 correspondence is it considered that cycles would be "in phase", i.e. synchronized. Any other non-synchronous relationship is "out of phase".

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marshall et al.

It would have been obvious to one of ordinary skill in the art to modify the illumination system of Marshall by substituting other types of light valves known to be used in color

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sequential projection systems, such as LC systems, because such light valves behave similarly when exposed to light.

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marshall et al. in view of Stark et al. .

Marshall et al. discloses the invention substantially as claimed but does not teach the provision of a white filter segment.

Stark et al. teach the addition of a white filter segment to a multicolor filter device.

It would have been obvious to one skilled in the art at the time of the invention to modify the device of Marshall et al. by the addition of a white filter segment in order to enhance the brightness of the projected image.

Response to Arguments

7. Applicant's arguments filed 5/25/07 have been fully considered but they are not persuasive.

Applicant's explanation as to the function of the invention is not clearly established. Applicant asserts that Figure 3 show "1 and 2 periods of the sequential color cycle" and "phases" of "periods". What does that mean? It appears that Figure 3 shows 2 complete cycles. Figure 4 does show a complete cycle plus an additional portion. A cycle would commonly be equal to that of the display time frame of a single image, since no alternate definition has been applied in the specification.

As to applicants assertion that Marshall shows an "in phase" system the Examiner disagrees, as has been clarified above. A cycle is defined as "a measure of frequency (cycles per

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second) of an AC current". With the frequency of the light source and the color cycle of Marshall, such a system in "out of phase".

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

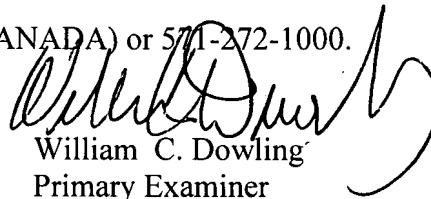
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Dowling whose telephone number is 571-272-2116. The examiner can normally be reached on MON-THURS.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on 571-272-2399. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



William C. Dowling
Primary Examiner
Art Unit 2851

wcd